

# Part 573 Safety Recall Report

# 19V-544

**Manufacturer Name :** Toyota Motor Engineering & Manufacturing

**Submission Date :** JUL 24, 2019

**NHTSA Recall No. :** 19V-544

**Manufacturer Recall No. :** See attached report



## Manufacturer Information :

**Manufacturer Name :** Toyota Motor Engineering & Manufacturing

**Address :** 6565 Headquarters Drive

Plano TX 75024

**Company phone :** 1-800-331-4331

## Population :

**Number of potentially involved :** 6,925

**Estimated percentage with defect :** 25 %

## Vehicle Information :

**Vehicle 1 :** 2019-2019 Lexus LS500

**Vehicle Type :**

**Body Style :**

**Power Train :** NR

**Descriptive Information :** (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

**Production Dates :** MAY 15, 2019 - MAY 31, 2019

**VIN Range 1 : Begin :**

NR

**End :** NR

Not sequential

**Vehicle 2 :** 2019-2019 Lexus LC500

**Vehicle Type :**

**Body Style :**

**Power Train :** NR

**Descriptive Information :** (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : MAY 15, 2019 - JUN 03, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 3 : 2020-2020 Toyota Corolla HV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : APR 25, 2019 - MAY 31, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 4 : 2019-2019 Toyota Prius

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : APR 26, 2019 - MAY 31, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 5 : 2019-2020 Toyota Prius Prime

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake

booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : APR 26, 2019 - MAY 31, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 6 : 2019-2019 Toyota RAV4 HV

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : APR 26, 2019 - JUN 03, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 7 : 2019-2019 Lexus ES300h

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : MAY 21, 2019 - MAY 21, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 8 : 2019-2019 Lexus UX250h

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder

produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : MAY 06, 2019 - MAY 31, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Vehicle 9 : 2019-2019 Lexus LS500h

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) Only vehicles in the above production range which had a brake booster pump containing a plastic brush holder produced with an improper shape discussed below could be affected. Note: Based on production records during the specific manufacturing process discussed below, Toyota estimates approximately 25% of the vehicle population may contain a brake booster pump which was manufactured with inappropriate parts. However, whether the noncompliance is present on each potentially affected vehicle depends on the variation of each individual part.

Production Dates : MAY 17, 2019 - MAY 27, 2019

VIN Range 1 : Begin :

NR

End : NR

Not sequential

## Description of Noncompliance :

Description of the Noncompliance : The subject vehicles are equipped with a brake booster pump consisting of an accumulator and a pump motor which contains a plastic brush holder to hold the motor brushes. There is a possibility that the plastic brush holder may have been produced with an improper shape, causing one of the brushes to become stuck in the brush holder. If this were to occur, the brush would be unable to maintain an electrical connection within the motor and may cause the pump motor to stop operating. If the pump motor stops operating, multiple warning lights and messages will illuminate, and/or audible chimes will sound. In this condition, depending on brake fluid pressure in the accumulator and brake pedal stroke amount, braking assist could be lost completely after several attempts to apply the brake pedal. In addition, the Vehicle Stability Control system will become deactivated, and other vehicle features could be affected. A sudden and complete loss of braking assist while driving could increase the vehicle stopping distance and may increase the risk of a crash. Further, deactivating the Vehicle Stability Control system may cause the subject vehicles to not meet the requirements of FMVSS No. 126, paragraph S5.1.2, which could increase the risk of a crash.

FMVSS 1 : 126 - Electronic stability control systems

FMVSS 2 : NR

**Description of the Safety Risk :** If the pump motor stops operating, multiple warning lights and messages will illuminate, and/or audible chimes will sound. In this condition, depending on brake fluid pressure in the accumulator and brake pedal stroke amount, braking assist could be lost completely after several attempts to apply the brake pedal. In addition, the Vehicle Stability Control system will become deactivated, and other vehicle features could be affected. A sudden and complete loss of braking assist while driving could increase the vehicle stopping distance and may increase the risk of a crash. Further, deactivating the Vehicle Stability Control system may cause the subject vehicles to not meet the requirements of FMVSS No. 126, paragraph S5.1.2, which could increase the risk of a crash.

**Description of the Cause :** NR

**Identification of Any Warning that can Occur :** NR

## Supplier Identification :

### Component Manufacturer

**Name :** ADVICS CO., LTD.

**Address :** 4-29 Nitto-cho

Handa-city Aichi FOREIGN STATES 475-0033

**Country :** Japan

## Chronology :

In late May 2019, warning lights were found illuminated on certain vehicles during a final inspection process for braking and/or while driving from the final inspection line to the vehicle yard at certain Toyota manufacturing plants. Toyota inspected these vehicles and found Diagnostic Trouble Codes related to the brake booster pump. Toyota and the supplier investigated the recovered brake booster pumps. The brush holder within the pump motor was found to be out-of-specification. The supplier found that a component of the upper mold of the die at one of two molding facilities used to produce brush holders was replaced on April 11, 2019, creating this condition. If the brush holder is out-of-specification, the Vehicle Stability Control system may become deactivated. (In addition, the Regenerative Brake, Antilock Brake, Electronic Brake force Distribution, Traction Control, Brake Assist, Brake Hold, Pre-Crash Brake, Adaptive Cruise Control, Intuitive Parking Assist, Intelligent Clearance Sonar, Emergency Stop Signal and Active Cornering Assist system will also become deactivated for certain vehicles, and for some vehicle models, the Electrical Parking Brake system function will also be limited.) As a result, it was determined on July 18, 2019, that some vehicles may not meet the requirement of S5.1.2 of FMVSS 126.

**Description of Remedy :**

Description of Remedy Program : All known owners of the subject vehicles will be notified by first class mail to return their vehicles to a Toyota or a Lexus dealer. For all involved vehicles, based on the vehicle identification number or an inspection, the dealer will replace the brake booster pump, if necessary, with a new one at no cost. As the owner notification letters will be mailed out well within the active period of the Toyota/Lexus New Vehicle Limited Warranty, all involved vehicle owners for this recall would have been provided a repair at no cost under Toyota's or Lexus's Warranty.

How Remedy Component Differs from Recalled Component : Recalled Component Name: Pump Assy, Brake Booster w/ Accumulator, Recalled Component Description: Brake Booster Pump, Recalled Component Part Numbers: 47070-47070, 47070-42030, 47070-33050, 47070-50050, 47070-11010, 47070-12030

Identify How/When Recall Condition was Corrected in Production : NR

**Recall Schedule :**

Description of Recall Schedule : Notifications to owners of the affected vehicles will occur by September 22, 2019. A copy of the draft owner notification letter(s) will be submitted as soon as available. Notifications to distributors/dealers will be sent on July 24, 2019. Copies of dealer communications will be submitted as they are issued.

Planned Dealer Notification Date : JUL 24, 2019 - JUL 24, 2019

Planned Owner Notification Date : SEP 09, 2019 - SEP 22, 2019

\* NR - Not Reported